I.   Office Action Summary

Claims 1-19 and 23-35 and 37-44 are pending, (of which claims 1, 16, 23, 27, 31 and 39 are independent). In the Office Action mailed May 16, 2007, the Examiner rejected claims 1-19 and 41-43 under 35 U.S.C. § 101, and rejected claims 1-35 and 37-43 under 35 U.S.C. § 103(a). After careful review of the cited references, Applicants request favorable reconsideration in view of the following remarks.

II.   Response to Rejection of Claims under 35 U.S.C. § 101

Claims 1-19 and 41-43 were rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. The Examiner asserted that these claims are directed to a computer-based system, and the body of the claims allegedly recite various steps including a template normalizer and an automatic normalizer. The Examiner asserted that these apparent steps are directed to software per se, and are not recited in conjunction with a physical structure.

Applicants have amended claim 1 to recite a "computer-based system for executing instructions stored on a computer-readable medium for normalizing information content in a document, the instructions being executed to perform functions of … a template normalizer … and an automatic normalizer." Independent claim 16 has been similarly amended. Applicants request that the claim rejections under 35 U.S.C. § 101 be withdrawn.

III.   Response to Rejection of Claims under 35 U.S.C. § 103(a)

Claims 1-35 and 37-43 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bickmore et al. "Web Page Filtering and Re-Authoring for Mobile Users," published in 1999 by The Computer Journal (Bickmore) in view of U.S. Patent No. 6,359,633 (Balasubramaniam). To

establish a *prima facie* case of obviousness under §103 the cited references must teach or suggest all the claim limitations and indicate how to combine the references to arrive at the present invention. (MPEP § 2142).

A.   Independent Claim 1

Applicants have amended claim 1 to remove unnecessary claim limitations and add "wherein the automatic normalizer compares the information content in the document with information content from a previously normalized document to determine if similar nodes exist, and if so, the automatic normalizer collapses the information content in the document in a manner similar to the previously normalized document," which is discussed at least on page 35 of the specification. Applicants have also added dependent claim 44, which states that "the previously normalized document is the most recent normalized document." Applicants submit that the combination of Bickmore and Balasubramaniam does not teach or suggest these claim limitations.

Bickmore does not mention using results from previously normalized web pages to dictate how to normalize a subsequent web page. Bickmore only discusses transforming each web page individually and without use of or comparison with prior transformation results of similar web pages. Similarly, Balasubramaniam is only concerned with modifying documents individually and not based on past results, because Balasubramaniam teaches a method to create a hyperlinked abstract of a markup language document that is a summarized version of the document. Thus, a subsequent document will be summarized on its own, and as such, it would not have been obvious to try or make sense to modify subsequent articles based on results of previously modified articles.

Since the combination of Bickmore and Balasubramaniam does not teach or suggest all limitations of independent claim 1, then the combination does not render claims 1-15 and 41-44 obvious.

B.   Independent Claims 16 and 27

Applicants submit that the combination of Bickmore and Balasubramaniam fails to teach or suggest "wherein if a node has no effect on a visual display of the information content and the node is not folder contents, the node is removed," as in claim 16 and similarly in independent claim 27.

Applicants submit that the Examiner has not shown any teaching within either Bickmore or Balasubramaniam that shows "wherein if a node has no effect on a visual display of the information content and the node is not folder contents, the node is removed," as in claim 16 and similarly in claim 27.

The Examiner asserted that Bickmore teaches that if screen space is too limited on the client device or if the client device cannot otherwise display the image, the transformation process will remove the images from the document. (Office Action 5.16.07, page 12 and 28-29). However, the Examiner has not asserted, and Bickmore does not teach or suggest, to make the determination of whether a node has an effect on a visual display, and if not, to remove the node, as recited in claim 16.

Claim 16 (and similarly Claim 27) recites to remove nodes that do not affect a visual display of the information content. For example, nodes that represent a beginning "HTML" tag may not be considered significant since that tag has no effect on presentation, and can be removed. (Spec. page 37, lines 10-17). Applicants submit that Bickmore does not teach analyzing each node to determine if the node has an effect on a visual display of the information

content, and if not, to remove the node. Bickmore only teaches to remove information when it cannot physically be displayed on the client device, which is the case when an image is too large to be displayed on the client device, and in that instance, the node representing the image clearly has an effect on the visual display of the information content.

In fact, the node presenting the image is information content, and because it is removed, that teaching in Bickmore is contrary to the recited limitation of "wherein if ... the node is **not** folder contents, the node is removed," as in claim 16 and "removing nodes that do **not** ... represent the information content to be displayed on the device," as in claim 27. (emphasis added).

Balasubramaniam also does not teach or suggest to make the determination of whether a node has an effect on a visual display, and if not, to remove the node, as recited in claims 16 and 27. In contrast, Balasubramaniam teaches to summarize a document, and in doing so, to remove much of the information present within the original document. Balasubramaniam teaches to group nodes together so that the number of nodes in a tree are reduced. The grouping is performed using user input, such as for example, if the user just wants to see a stock portfolio, every node in the tree except the datatable with information regarding stocks is dropped. (col. 4, lines 47-51).

Moreover, like Bickmore above, because Balasubramaniam teaches to summarize documents, Balasubramaniam necessarily teaches removing information content from the documents, which is in contrast to the claim language: "wherein if ... the node is **not** folder contents, the node is removed," as in claim 16 and "removing nodes that do **not** ... represent the information content to be displayed on the device," as in claim 27. (emphasis added).

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Since the combination of Bickmore and Balasubramaniam fails to teach or suggest all claim limitations of independent claims 16 or 27, this combination does not render claims 16-19 or 27-30 obvious.

C.   Independent Claims 23 and 39

Applicants submit that the combination of Bickmore and Balasubramaniam does not teach or suggest "determining if the information content contains normalization markup, and if so," "utilizing normalization markup in the information content to normalize the information content, wherein *the normalization markup provide at least one specific instruction for normalizing the information content*," as in claim 23 and similarly in independent claim 39 (emphasis added).

The Examiner cited to the Bickmore reference in general (citing all pages 534-546) as alleging teaching this limitation, and stated that the Bickmore reference discusses cascading style sheets (CSS) that define a set of display attributes for different structural portions of a document (e.g., all headings are displaying using red 18-point Times font). (Office Action 5.16.07, page 15 and 32).

However, the Examiner has not asserted, and Bickmore does not teach or suggest, using markup or data within the information content itself as specific instructions for how to modify the document. For example, the present application describes that general normalization rules may not apply to all web sites, and in such instances, it may be possible to use specified rules provided by the website. (Spec. page 45).   The present application further states that normalization markup is a set of attributes that is introduced into existing HTML content, and are used to trigger the automatic normalization process to perform certain operations. (Spec. pages

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45-47). Applicants have added new claims 45-47, which include further limitations defining examples of normalization markup functions.

Bickmore does not teach or suggest using specific instructions present within the HTML web page to dictate how to modify the web page for display on the client device. Since the combination of Bickmore and Balasubramaniam fails to teach or suggest all claim limitations of independent claims 23 and 39, this combination does not render claims 23-26 or 39-40 obvious.

Applicants also note that aspects of dependent claims 6-12, 17-18 and 30 include limitations pertaining to use of normalization markup, and are not obvious in view of the cited references for at least this reason alone.

D.   Independent Claim 31

Claim 31 recites "wherein the plurality of arrays contain values associated with the nodes of the data, and wherein operations on the nodes can be carried out by utilizing the value as referenced to the affected nodes," and "wherein separate arrays are used to store values representing properties of each node including properties selected from the group consisting of a parent node, a previous sibling node, a next sibling node, and a first child node." Applicants submit that neither Bickmore nor Balasubramaniam, separately or in combination, teach or suggest this claim limitation.

The Examiner asserted that Bickmore fails to teach this limitation, but that Balasubramaniam does so at col. 3 lines 40-55. (Office Action 5.16.07, pages 16-17). The Examiner asserted that the claimed arrays containing values associated with the nodes is equivalent to the syntax tree as discussed in Balasubramaniam.

Applicants disagree. Balasubramaniam does not teach or discuss storing information relating to the nodes into a plurality of arrays in the specific manner as recited in claim 31. In

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fact, Balasubramaniam does not discuss storing data pertaining to the nodes at all, and thus fails to teach that "the plurality of arrays contain values associated with the nodes of the data, and wherein operations on the nodes can be carried out by utilizing the value as referenced to the affected nodes," or that "separate arrays are used to store values representing properties of each node including properties selected from the group consisting of a parent node, a previous sibling node, a next sibling node, and a first child node," as in claim 31.

Since the combination of Bickmore and Balasubramaniam fails to teach or suggest all claim limitations of claim 31, this combination does not render claims 31-35 and 37-38 obvious.

IV.   Conclusion

Applicants respectively submit that, in view of the remarks above, all of the pending claims are in condition for allowance. Applicants therefore respectfully request such action. The Examiner is invited to call the undersigned at (312) 913-3331 with any questions or comments.

Respectfully submitted,

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